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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/811,039  | 03/26/2004  | Chan Young Park      | 2080-3243           | 9531             |
| 35884   | 7590        | 12/06/2005           | EXAMINER            |                  |
| LEE, HONG, DEGERMAN, KANG & SCHMADEKA, P.C.<br>801 SOUTH FIQUEROA STREET<br>14TH FLOOR<br>LOS ANGELES, CA 90017 |             |                      | KIANNI, KAVEH C     |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2883                |                  |

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/811,039

Applicant(s)

PARK, CHAN YOUNG

Examiner

Kianni C. Kaveh

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2004 and 15 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 8 is/are rejected.
- 7) ☒ Claim(s) 3-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

KAVEH KIANNI  
PRIMARY EXAMINER

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, drawn to a laser display device including a laser light source, an optical fiber transmitting the laser beams generated from the laser light source and light phase controller, classified in class 385, subclass 4.
- II. Claims 8-15, drawn to a method of controlling a laser display device, including the step of applying power on a piezo device, causing oscillation in the piezo device and generating a curve in an optical fiber, classified in class 385, subclass 32.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case Invention I can be practiced using mechanical means for controlling light phase rather than using a piezo device as claimed in invention II. Thus, each of the above group limitations is directed toward an invention that would require a different search than that of other group inventions.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Luckhardt on 11/15/05 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-8. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-15 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation 'the piezo device' in 2<sup>nd</sup> line. There is insufficient antecedent basis for this limitation in the claim. Correction is required. The correction may make this claim allowable.

***Allowable Subject Matter***

Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Claims 3-7 are allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein the light phase controller comprises: a piezo device; first and second electrodes respectively formed on upper and lower surfaces of the piezo device, and providing power to the piezo device; and first and second fixation plates formed on the first electrode to fix the optical fiber in combination with the rest of the limitations of the base claim.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinberger et al. (US 5461686).

Regarding claims 1, 2, Weinberger teaches a laser device (see at least fig. 1 and col. 3, lines 9-27) comprising: a laser light source generating laser beams (see at least col. 3, lines 9-27); an optical fiber 52 transmitting the laser beams generated from the laser light source; and a light phase controller (shown in fig. 5, items 53-56) forming a curve in the optical fiber 52, so as to control a phase of the laser beams passing through the optical fiber 51 (see at least abstract).

However, Weinberger regarding the above Preamble Limitation 'laser device' does not teach 'laser display device' and wherein the laser light source includes a red laser light source, a green laser light source, and a blue laser light source.

Although the examiner does not give any patentable weight to 'display' since such limitation does not have any support in the body of the claimed invention, nevertheless, it would have been obvious to a person of ordinary skill in the art when the invention was made to use the above laser device system in the 'laser display device' and also such colored beam laser is extremely conventional --as also referred by the applicant as prior art teaching (see specification, parag. 0012), see also prior art listed below-- and since such usage would provide sensing mechanism/measurements possible over wide range of parameters (see col. 1, 1<sup>st</sup> parag.).

### ***Citation of Relevant Prior Art***

Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:

US 6104371 A Wang; Ting et al. teaches conventional RGB color laser fiber for display

US 5715337 A Spitzer; Mark Bradley et al. Teaches Red blue and Green laser fiber for display

JP 04256801 HIROTA, KATSUHIKO et al. teach at least claim 1

JP 01236070 A YANO, NOBUYUKI teach at least claim 1

US 5315365 A Hakimi; Hosain et al.

US 6358748 B1 Weiss; Jonathan D.

US 5633494 A     Danisch; Lee

US 4102579 A     Stewart; William James

These references are cited herein to show the relevance of the apparatus/methods taught within these references as prior art.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9306 (for formal communications intended for entry)

**or:**

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.



**KAVEH KIANNI  
PRIMARY EXAMINER**

K. Cyrus Kianni  
Primary Patent Examiner  
Group Art Unit 2883

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November 30, 2005